

The Cincinnati

**ELECTRIC DRILLS
GRINDERS-BUFFERS
PORTABLE TOOLS**



THE CINCINNATI ELECTRICAL TOOL CO.

DIVISION OF THE R. K. LE BLOND MACHINE TOOL CO.

CINCINNATI, OHIO, U. S. A.



SERVING INDUSTRY THROUGHOUT THE WORLD

CATALOG No. 327

**L. BEST CO., Inc.
28 W. Broadway
New York, New York**

The Cincinnati

IN ORDERING

always mention voltage, and state whether current is Alternating or Direct. If Alternating Current, give voltage, cycles and phase.

UNIVERSAL MOTOR FOR A. C. AND D. C.

The Universal Motor Drills and Grinders can be used on both alternating current and direct current of the same voltage. If alternating current, 25 to 60 cycles, single phase.

The Standard windings for Universal Motor Tools are 110 volts and 220 volts, but we can also furnish them for 250 volts.

All tools will operate satisfactorily on 10% over or under rated voltages.

ALTERNATING CURRENT

Where a tool is to be run from a lamp socket, it should be ordered single phase. Two and three phase machines are operated from the power circuit.

Single phase machines can be run from a two or three phase circuit, by attaching to one phase (2 wires) of the line.

Grinders of 2 H. P. and over, furnished for two or three phase only.

Alternating current machines can be furnished for 220, 440 and 550 volts, 25 to 60 cycles, two phase or three phase.

GUARANTEE

Every electric tool has been carefully inspected before shipment, and we guarantee to correct any defect due to faulty material or workmanship. Our obligation assumed under this guarantee is limited to making replacement of any part or parts returned to us at our factory, or to our authorized service stations, transportation charges prepaid, which prove to our satisfaction upon examination to have been defective and have not been misused or carelessly handled. We reserve the right to decline responsibility where repairs have been made or attempted by others. This guarantee is in lieu of any other liability on our electric tools or parts. None other is authorized.

District Sales Offices

BOSTON

PHILADELPHIA

CHICAGO

PITTSBURGH

DETROIT

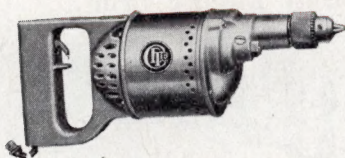
SAN FRANCISCO

NEW YORK

SEATTLE



THE CINCINNATI ELECTRICAL TOOL CO.



1/4" "Junior" Electric Drill

Universal Motor for
A. C. and D. C.

Type	Volts	Capacity in Steel	No Load Speed	Weight Lbs.	Net Price
UL	110	1/4	1800	5 1/2	\$21.50

Also furnished for 220 volts.

Drilling Stand shown on page 6.

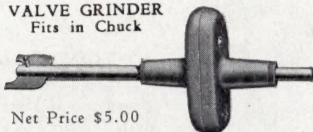
For extra attachments, see page 7.

REGULAR EQUIPMENT — Three jaw geared chuck, 10 feet all rubber electric cable and attachment plug.

This drill can be used for all classes of work, and is particularly adapted for Garages, Service Stations, Contractors, Wood Working and Sheet Metal Plants, and light drilling of all kinds.

Attachments for Types UL, ULS, UAS, UBS and UK

VALVE GRINDER Fits in Chuck



Net Price \$5.00



CARBON CLEANING BRUSH
Fits in Chuck
Net Price \$1.75

GRINDING STAND

Net Price
\$2.00



Heavy Duty Electric Drill

Ball Bearing
Universal Motor
for
A. C. and D. C.
 $\frac{1}{4}$ " , $\frac{5}{16}$ " and $\frac{3}{8}$ "
Capacities



Type	Volts	Capacity in Steel	No Load Speed	Weight Lbs.	Net Price
ULS	110	$\frac{1}{4}$ "	2000	6	\$36.00
UAS	110	$\frac{1}{4}$ "	1600	6 $\frac{1}{2}$	42.00
UBS	110	$\frac{5}{16}$ "	1400	7	48.00
UK	110	$\frac{3}{8}$ "	1200	8	50.00

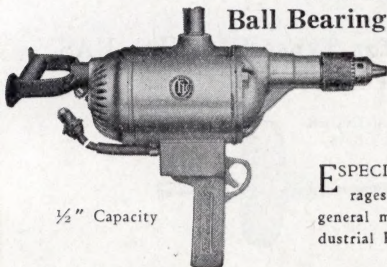
Also furnished for 220 and 250 volts.

REGULAR EQUIPMENT — Three jaw geared chuck, 10 feet 3 wire all-rubber electric cable and attachment plug. Heavy duty ball bearing drills especially adapted for drilling in steel, brass, aluminum, sheet metal and for automobile body work, car building, window frames, etc.

Drilling Stand shown on page 6.

Extra attachments shown on pages 3 and 7.

Standard Duty Ball Bearing Electric Drill



Universal Motor for
A. C. and D. C.

$\frac{1}{2}$ " Capacity

ESPECIALLY adapted for Garages, Service Stations, and general maintenance work in Industrial Plants of all kinds.

Type	Volts	Capacity in Steel	No Load Speed	Weight Lbs.	Net Price
UO	110	$\frac{1}{2}$ "	550	14	\$55.00

Also furnished for 220 and 250 volts.

REGULAR EQUIPMENT — Three jaw geared chuck, 10 feet 3 wire all-rubber cable and attachment plug.

Drilling Stands shown on page 6.

Extra attachments on page 7.

Heavy Duty Electric Drills

$\frac{3}{8}$ " , $\frac{1}{2}$ " , $\frac{5}{8}$ " and $\frac{3}{4}$ "
Capacities
Single and
Two Speeds

Ball Bearing,
Universal Motor
for A.C. and D.C.

H EAVY duty drill, especially adapted for production and maintenance work in industrial plants of all kinds.

Regular equipment, 3-jaw geared chuck, 10 feet 3 wire all-rubber electric cable and attachment plug.

Type	Volts	Capacity in Steel	No Load Speed	Weight Lbs.	Net Price
UT	110	$\frac{3}{8}$ "	800	14	\$54.00
UH	110	$\frac{1}{2}$ "	550	17	65.00
UD (2sp)	110	$\frac{1}{2}$ "	550-800	19	70.00
UE	110	$\frac{5}{8}$ "	450	19	70.00
UED(2sp)	110	$\frac{5}{8}$ "	550-800	20	75.00
UW	110	$\frac{3}{4}$ "	425	28	85.00

Also furnished for 220 and 250 volts.

Drilling Stands shown on page 6.

Extra attachments shown on page 7.

Heavy Duty Electric Drills

$\frac{7}{8}$ " , 1" and 1 $\frac{1}{4}$ "
Capacities
Single and Two Speeds

Ball Bearing.
Universal Motor
for A.C. and D.C.

A POWERFUL DRILL, suitable for production drilling of all kinds in steel, cast iron, brass, aluminum and sheet metal; Types UN and UR have quick make-and-break two-pole trigger switch. Types UP and UG equipped with automatic self-releasing two-pole switch.

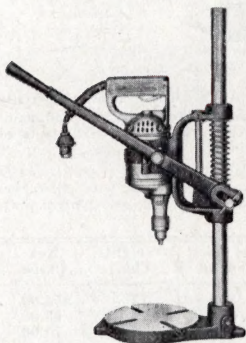
Drilling Stands
shown on
page 6

Type	Volts	Capacity in Steel	No Load Speed	Weight Lbs.	Net Price
UN	110	$\frac{7}{8}$ "	380	23	\$ 96.00
UR (2 sp)	110	$\frac{7}{8}$ "	380-660	25	105.00
UP	110	1"	335	28	115.00
UG	110	1 $\frac{1}{4}$ "	290	30	150.00

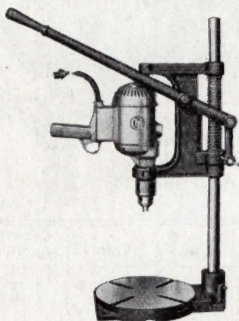
Also furnished for 220 and 250 volts.

The Cincinnati

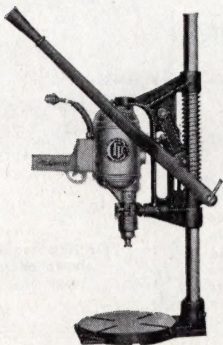
Bench and Post Drill Stands



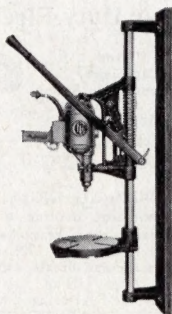
No. 10 Stand
for Types UL, ULS,
UAS, UBS and UK
Net Price \$14.00



No. 12 Stand
For Types UT and
UO Only
Net Price \$20.00



No. 00 Stand
For Drills $\frac{1}{2}$ " to $1\frac{1}{4}$ ".
Net Price \$28.00



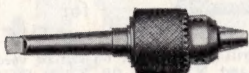
No. 00W Post Drill
Stand for Drills
 $\frac{1}{2}$ " to $1\frac{1}{4}$ ".
Net Price \$32.00

When ordering No. 00 or No. 00W Stands, mention type of drill so proper adaptor will be furnished.



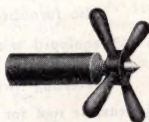
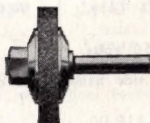
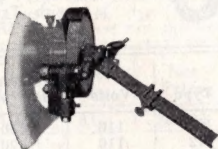
THE CINCINNATI ELECTRICAL TOOL CO.

Attachments for Drills and Grinders



Twist Drill Grinding Attachment
For grinding twist drills from
 $\frac{1}{8}$ " to $1\frac{1}{4}$ " diameter.
Net Price \$15.00

$\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ "
CHUCKS WITH TAPER
ARBORS
Prices on application



GRINDING WHEEL AND
ARBOR

For Electric Drills

$\frac{1}{4}$ " to $\frac{3}{4}$ "

Prices on application

FEED SCREW
For Electric Drills
 $\frac{1}{2}$ " to $1\frac{1}{4}$ "
Net Price \$4.00



GRINDING
WHEELS

Sizes, 3" to 12"
diameter;

$\frac{3}{8}$ " to 2" width.

SEWED RAG
BUFFING WHEELS

Sizes, 4", 6", 8",
10" diameter;

$\frac{1}{2}$ " to 1" width.

Prices on application.

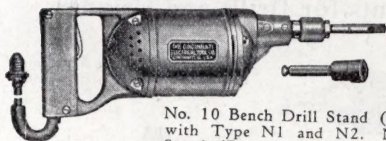
WIRE WHEEL
BRUSHES

Sizes, 4", 6", 8",
10", 12" diameter.

$\frac{1}{2}$ " to 2" width.

The Cincinnati

Electric Screw Drivers and Nut Setters



Ball Bearing
Universal Motor
for
A. C. and D. C.

No. 10 Bench Drill Stand (Page 6) can be used with Type N1 and N2. No. 00 Bench Drill Stand (Page 6) can be used with N3.

Type	Volts	Speed R.P. M.	Weight Lbs.	Length Overall	Net Price
N1	110	450	7	13 $\frac{3}{4}$ "	\$54.00
N2	110	370	8	13 $\frac{3}{4}$ "	68.00
*N3	110	350	13	14 $\frac{1}{2}$ "	90.00

Also furnished for 220 and 250 volts.

*Type N3 equipped with switch in one side handle, the other detachable.

Reversing Switch — Net Price \$10.00.

AN indispensable tool for speeding up production in manufacturing plants of every description wherever there are screws to be driven or nuts to be set. Body builders, wood and metal working plants, automobile and furniture factories, etc.—in fact, too many industries to enumerate, have found these tools especially adapted to their work.

Accessories for Electric Screw Drivers and Nut Setters



Socket Adapter for Hexagon
or Square Sockets.
Net Price \$1.00.



Screw Driver Bit
Net Price \$1.00.



Hexagon
Socket



Square Socket
Price on application.



Centering Sleeve
Net Price \$1.00.



THE CINCINNATI ELECTRICAL TOOL CO.

Electric Tapper



Universal Motor
for
A. C. and D. C.
Ball Bearing

Capacity: Steel, $\frac{1}{4}$ " tap; Cast Iron, $\frac{3}{8}$ " tap;
Brass and Aluminum, $\frac{3}{8}$ " tap.

No. 10 Bench Drill Stand (Page 6) can be used with this tool.

Type	Volts	Forward No Load Speed	Reverse No Load Speed	Weight Lbs.	Net Price
UJ	110	350 RPM	500 RPM	8½	\$85.00

Also furnished for 220 and 250 volts.

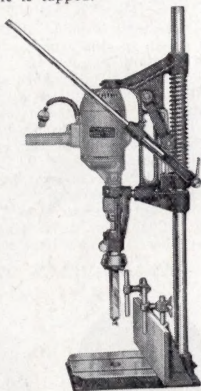
REGULAR EQUIPMENT—Screw back chuck for holding taps. 10 feet, 3 wire all-rubber electric cable and attachment plug. This Electric Tapper is especially designed for speedy tapping in metal-working industries of all kinds. A slight pressure on the spindle will drive the tap forward. Automatically reverses at fast speed, with slight backward pull when hole is tapped.

Bench Mortiser and Drilling Machine

A powerful ball-bearing tool especially adapted for mortising, wood boring and metal drilling of all kinds. An ideal machine for the shop which does not have enough mortising to do to justify the investment in a single purpose tool, such as schools, cabinet shops, contractors, builders, carpenter shops, etc.

Standard equipment— $\frac{3}{8}$ " hollow chisel and bit, collars to take hollow chisels from $\frac{1}{4}$ " to $\frac{3}{4}$ ", spade and side handles for portable electric drill, 10 feet 3 wire all-rubber electric cord and attachment plug.

Ball Bearing
Universal Motor for A. C. or D. C.



Type	Volts	Speed R.P.M.	Mortis- ing Ca- pacity	Boring Capac. Wood	Drilling Capac. Steel	Weight Lbs.	Net Price
UM	110	750	Up to $\frac{3}{4}$ "	Up to 2"	$\frac{5}{8}$ "	110	\$125.00
UM	110	1500	Up to $\frac{3}{4}$ "	Up to 2"	$\frac{5}{8}$ "	110	125.00

Also furnished for 220 and 250 volts.

The Cincinnati

Ball Bearing Polishing and Sanding Machines



Universal Motor for Direct and Alternating Current.

Type	Volts	Load Speed RPM	Diameter Abrasive Disc	Diameter Flexible Backing Pad	Weight Pounds	Net Price
PN	110	1200		6½"	6¼	\$60.00
BN	110	5000	7"	6½"	13	68.00
HN	110	2500	9¼"	8"	13½	88.00

Also furnished for 220 and 250 volts.

TYPE PN POLISHING MACHINE was especially designed to meet the demand of the automobile body and refinishing shops for a tool to eliminate hand-rubbing and polishing lacquer.

Standard Equipment — 1 flexible backing pad; 2 lamb's wool bonnets; 25 ft. all-rubber cable and attachment plug.

Type PN complete with 1 gallon polishing liquid; ½ gallon body wax and ½ gallon top wax. Net price \$65.00.

Type BN Sanding Machine was primarily designed to meet the increasing demand of the automobile body and refinishing shops for a high-speed tool.

Type HN is the most flexible and efficient polishing and grinding device on the market.

Standard Equipment for Types BN and HN — 1 flexible backing pad; 12 abrasive discs, 4 each coarse, medium and fine grit; 20 ft. all-rubber cable and attachment plug.

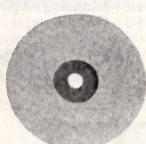
ATTACHMENTS FOR POLISHING AND SANDING MACHINES



Abrasive disc
for
sanding
or
grinding.



Lamb's wool bonnet
for final buffing
of lacquer.
Fits over
flexible pad.



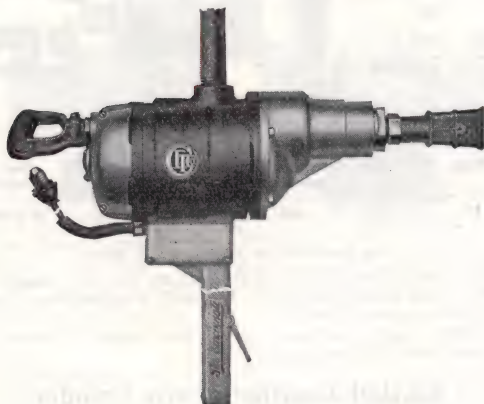
Felt pad for use
with rubbing
compound for
polishing lacquer.

Prices on application.



THE CINCINNATI ELECTRICAL TOOL CO.

Electric Coal Drill BALL BEARING



Alternating Current—Direct Current
Universal Motor for both A. C. and D. C.

Type and Current	Volts	No Load Speed	Weight Lbs.	Net Price
CH -DC	115-250	500	48	\$168.00
*GCA-AC	220-440	500	59	168.00
GCU-Uni.	110-250	600	47	168.00

*Made in 2 or 3 phase only, center spindle.

THE most powerful Drill of its kind made, size and weight considered. Gears are of special analysis alloy steel, heat-treated and hardened to withstand heavy strain and hard usage. Two-pole automatic switch.

Regular Equipment—25 feet all-rubber 3-wire cable, attachment plug, side handle, ground clamp, flat taper chuck, grip handle and removable side handle.

Square socket furnished instead of flat taper chuck if desired; also breast plate instead of spade handle when required.

The Cincinnati

Electric Valve Grinder

Universal Motor
for
A. C. and D. C.
Ball Bearing



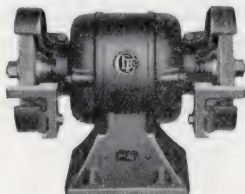
Type	Volts	Oscillations per Min.	Length Overall	Weight Lbs.	Net Price
UV	110	400	12"	6½	\$ 8.00

Also furnished for 220 and 250 volts.

REGULAR EQUIPMENT—Four detachable bits, lift spring, box of valve grinding compound, 10 feet 3 wire all-rubber electric cable and attachment plug.

A light weight, oscillating valve grinder, especially adapted for Garages, Service Stations, etc.

6" Ball Bearing Bench Grinder



Alternating Current, 110 Volts.
60 cycles, single phase only.

Type	Volts	Capacity	Load Speed R.P.M.	2 Wheels Incl'd.	Weight Lbs.	Net Price
BEA	110-60-10	6"	3400	6x½x½	38	\$24.00

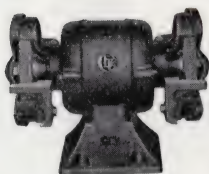
Sturdy low-priced grinder, suitable for light grinding of all kinds.

Equipment—Two grinding wheels, wheel guards, tool rests, toggle switch and electric cable with attachment plug.



THE CINCINNATI ELECTRICAL TOOL CO.

6" and 7" Ball Bearing Bench and Floor Grinders



6" Grinder



7" Grinder

FOR use in Garages, Service Stations, Repair Shops, Tool Rooms, etc., for grinding small tools and light castings of all kinds, also for polishing and buffing.

BENCH TYPE

Type and Current	Volts	H. P.	Load Speed R.P.M.	2 Wheels Incl'd	Weight Lbs.	Net Price
*BBA-AC	110	$\frac{1}{4}$	3450	$6 \times \frac{3}{4} \times \frac{1}{2}$	40	\$36.00
BB -DC	115-230	$\frac{1}{4}$	3400	$6 \times \frac{3}{4} \times \frac{1}{2}$	40	40.00
*BSA-AC	110	$\frac{1}{3}$	3450	$7 \times 1 \times \frac{5}{8}$	52	50.00
BS -DC	115-230	$\frac{1}{3}$	3000	$7 \times 1 \times \frac{5}{8}$	52	55.00

FLOOR TYPE WITH PEDESTAL

Type and Current	Volts	H. P.	Load Speed R.P.M.	2 Wheels Incl'd	Weight Lbs.	Net Price
*PBA-AC	110	$\frac{1}{4}$	3450	$6 \times \frac{3}{4} \times \frac{1}{2}$	127	\$51.00
PB -DC	115-230	$\frac{1}{4}$	3400	$6 \times \frac{3}{4} \times \frac{1}{2}$	127	55.00
*PSA-AC	110	$\frac{1}{3}$	3450	$7 \times 1 \times \frac{5}{8}$	148	65.00
PS -DC	115-230	$\frac{1}{3}$	3000	$7 \times 1 \times \frac{5}{8}$	148	70.00

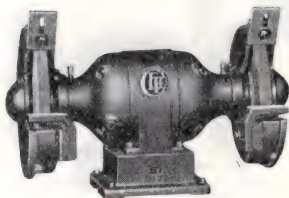
*Also made in 220 or 440 volts, 60 cycles, 1, 2 or 3 phase.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

Twist Drill Grinding Attachment for Grinding Drills $\frac{1}{8}$ " to $\frac{3}{8}$ " diameter, shown on page 7.

8" and 10" Ball Bearing Bench and Floor Grinders



Alternating Current
Direct Current

BENCH TYPE

Type and Current	Volts	H. P.	Load Speed R.P.M.	2 Wheels Incl'd	Weight Lbs.	Net Price
*BHA-AC	110-220	$\frac{1}{2}$	3400	8x1x $\frac{5}{8}$	120	\$85.00
BH -DC	115-230	$\frac{1}{2}$	3400	8x1x $\frac{5}{8}$	120	90.00
*BLA-AC	110-220	$\frac{1}{2}$	1750	10x1x $\frac{3}{4}$	145	90.00
BL -DC	115-230	$\frac{1}{2}$	1750	10x1x $\frac{3}{4}$	150	95.00
*BOA-AC	110-220	1	1750	10x1 $\frac{1}{4}$ x $\frac{3}{4}$	150	125.00
BO -DC	115-230	1	2000	10x1 $\frac{1}{4}$ x $\frac{3}{4}$	165	145.00

FLOOR TYPE

Type and Current	Volts	H. P.	Load Speed R.P.M.	2 Wheels Incl'd	Weight Lbs.	Net Price
*FHA-AC	110-220	$\frac{1}{2}$	3400	8x1x $\frac{5}{8}$	210	\$105.00
FH -DC	115-230	$\frac{1}{2}$	3400	8x1x $\frac{5}{8}$	210	110.00
*FLA-AC	110-220	$\frac{1}{2}$	1750	10x1x $\frac{3}{4}$	250	110.00
FL -DC	115-230	$\frac{1}{2}$	1750	10x1x $\frac{3}{4}$	250	115.00
*FOA-AC	110-220	1	1750	10x1 $\frac{1}{4}$ x $\frac{3}{4}$	310	155.00
FO -DC	115-230	1	2000	10x1 $\frac{1}{4}$ x $\frac{3}{4}$	325	175.00

*Also made in 220 or 440 volts, 60 cycles, 2 or 3 phase.
Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

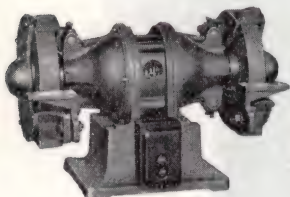
HEAVY DUTY Bench and Floor Grinders, especially built for constant use. Motor is fully enclosed, dirt and dust-proof. Wheel guards are adjustable for wear of wheels and comply with safety regulations. Removable covers bolted to the guards enclose the side of wheels.

Twist Drill Grinding Attachment for above Grinders for Grinding Drills $\frac{1}{8}$ " to $1\frac{1}{4}$ " diameter, shown on page 7.



THE CINCINNATI ELECTRICAL TOOL CO.

12" Ball Bearing Bench and Floor Grinders



Alternating Current — Direct Current

BENCH TYPE

Type and Current	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Distance bet. Wheels	Weight Lbs.	Net Price
*BTA - AC	220-440	2	1750	12x2x1 $\frac{1}{4}$	22 $\frac{1}{2}$ "	300	\$200.00
BT - DC	115-230	2	1750	12x2x1 $\frac{1}{4}$	23 $\frac{3}{4}$ "	330	260.00

FLOOR TYPE

Type and Current	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Hgt. to Cen- ter of Spindle	Distance bet. Wheels	Weight Lbs.	Net Price
*FTA - AC	220-440	2	1750	12x2x1 $\frac{1}{4}$	39"	22 $\frac{1}{2}$ "	450	\$230.00
FT - DC	115-230	2	1750	12x2x1 $\frac{1}{4}$	39"	23 $\frac{3}{4}$ "	480	290.00

*Made in 2 and 3 phase only.

Speed for 25 cycles, 1500 R.P.M.

Grinding wheels not included. Furnished on order.

For other than 50 or 60 cycles, increase price 10%.

FULLY ENCLOSED BENCH AND FLOOR GRINDERS, for general purpose grinding of all kinds. Wheel guards are fully enclosed safety type, adjustable to wear of wheels. Safety starter with push button control.

12" and 14" Ball Bearing Floor Grinders



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Size	Hgt.to Center of Spindle	Distance between Wheels	Weight Lbs.	Net Price
*HTA - AC	220-440	2	1750	12x2 x1 1/4	37 1/2	22 1/2 " "	470	\$250.00
HT - DC	115-230	2	1750	12x2 x1 1/4	38	22 1/2 " "	500	310.00
*HCA - AC	220-440	3	1750	14x2 1/2 x1 1/4	38	22 1/2 " "	610	285.00
HC - DC	115-230	3	1750	14x2 1/2 x1 1/4	39	23 " "	650	345.00
*HEA - AC	220-440	5	1750	14x3x1 1/4	38	24 " "	660	325.00
HE - DC	115-230	5	1750	14x3x1 1/4	39	24 1/2 " "	810	405.00

*Made in 2 and 3 phase only

Speed for 25 cycles, 1500 R.P.M.

Grinding wheels not included. Furnished on order.

For other than 50 or 60 cycles, increase price 10%.

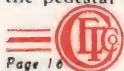
If eye shields are not required, deduct \$10.00 from net price.

Fully Enclosed Heavy Duty Floor Grinder suitable for the heaviest grinding of all kinds.

Wheel guards have exhaust connections, adjustable eye shields, and are adjustable for wear of wheels.

Covers are hinged to guards and completely enclose side of wheels.

Equipped with safety starting switch, mounted in the pedestal with push button control.



The Cincinnati

18" Ball Bearing Floor Grinder



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Speed R.P.M.	Wheels Rec'm'd	Hgt. to Center of Spindle	Distance between Wheels	Weight Lbs.	Net Price
*FFA-AC	220-440	5	1160	18x3 x1½	35"	27"	1050	\$415.00
FF -DC	115-230	5	1150	18x3 x1½	35"	27"	1150	510.00

*Made in 2 and 3 phase only.

Grinding wheels not included. Furnished on order

For other than 50 or 60 cycles, increase price 10%.

If eye shields are not required, deduct \$10.00 from net price.

FULLY enclosed Heavy Duty Grinder, especially adapted for heavy grinding in Railroad Shops, Structural Iron Works, Machine Shops, etc.

Wheel guards have exhaust connections, adjustable eye shields, and are adjustable for wear of wheels.

Guards have hinged covers and completely enclose side of wheels. Starting switch is full Safety Type, with push-button control, and is mounted on separate panel within the column.

Wide Type Ball Bearing Grinders



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Speed R.P.M.	Wheel Size	Distance bet. Wheels	Weight Lbs.	Net Price
†WAA -AC	110-220	$\frac{1}{2}$	3400	8x1 x $\frac{5}{8}$	29 $\frac{1}{2}$ "	220	130.00
WA -DC	115-230	$\frac{1}{2}$	3400	8x1 x $\frac{5}{8}$	29 $\frac{1}{2}$ "	220	145.00
†WBA -AC	110-220	1	1750	10x1 $\frac{1}{4}$ x $\frac{3}{4}$	31 $\frac{1}{2}$ "	350	185.00
WB -DC	115-230	1	1750	10x1 $\frac{1}{4}$ x $\frac{3}{4}$	31"	350	205.00
*WSA -AC	220-440	2	1750	12x2 x1 $\frac{1}{4}$	36"	490	285.00
WS -DC	115-220	2	1750	12x2 x1 $\frac{1}{4}$	36"	530	340.00
*WCA -AC	220-440	3	1750	14x2 $\frac{1}{2}$ x1 $\frac{1}{4}$	42"	650	325.00
WC -DC	115-230	3	1750	14x2 $\frac{1}{2}$ x1 $\frac{1}{4}$	42"	690	415.00
*WFA -AC	220-440	5	1750	14x3 x1 $\frac{1}{4}$	42"	800	365.00
WF -DC	115-220	5	1750	14x3 x1 $\frac{1}{4}$	42"	900	505.00

†Also made in 220 or 440 volts, 60 cycles, 2 or 3 phase.

*Made in 2 or 3 phase only.

Speed for 25 cycles, 1500 R.P.M.

Grinding wheels not included with 2, 3 and 5 H.P. Grinders. Furnished on order.

For other than 50 or 60 cycles, increase price 10%.

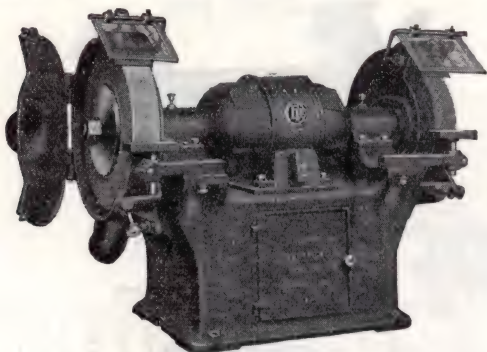
Eye shields are regularly furnished with 2, 3 and 5 H.P. Grinders only. If not desired, deduct \$10.00 from net price.

HEAVERY duty Grinder, especially adapted for continuous production work. The wide spread allows for maximum accessibility. Ball bearings are fully enclosed in dust-proof housings and correctly locked to the shaft to provide end thrust and eliminate shaft wear.



THE CINCINNATI ELECTRICAL TOOL CO.

Heavy Duty Roller Bearing Floor Grinders



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Distance between Wheels	Weight Lbs.	Net Price
*CFA -AC	220-440	5	1150	18x3 x2"	42"	1700	\$500.00
CF -DC	115-230	5	1160	18x3 x2"	42"	1900	565.00
*HGA -AC	220-440	5	1150	20x3 x2"	42"	1800	550.00
HG -DC	115-230	5	1160	20x3 x2"	42"	2000	620.00
*JSA -AC	220-440	7½	850	24x4 x2¼"	52½"	2625	750.00
JS -DC	115-230	7½	850	24x4 x2¼"	52½"	2840	895.00
*JTA -AC	220-440	10	850	24x4¼ x2¼"	52½"	2730	875.00
JT -DC	115-230	10	850	24x4¼ x2¼"	52½"	2940	1025.00

*Made in 2 or 3 phase only.

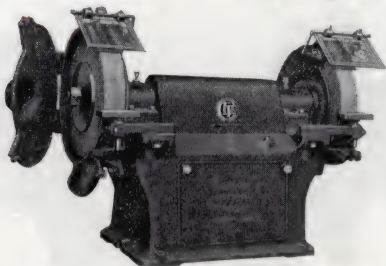
Grinding wheels not included. Furnished on order.

For other than 50 or 60 cycles, increase price 10%.

If eye shields are not desired, deduct \$10.00 from net price.

HEAVERY Duty Roller Bearing Grinder, especially designed for heavy grinding in foundries, steel mills, railroad and forge shops and all other plants where grinders are used in continuous service for production work. Timken roller bearings are adjustable to wear. Wheel guards are adjustable to wear of wheels. Equipped with hinged covers, exhaust connections, chip breakers and eye shields. Safety type starter, with push-button control.

Vee Belt Ball-Bearing Grinder



Alternating Current—Direct Current

Type	Volts	H. P.	Wheel Size	Diam. Shaft Bet. Flanges	Distance Bet. Wheels	Weight Lbs.	Net Price
BAA	220-440	5	18 "x3 "x10 "	2 1/4 "	52 5/8 "	2600	\$925.00
BCA	220-440	7 1/2	20 "x3 "x10 "	2 1/4 "	52 5/8 "	2700	975.00
BGA	220-440	10	24 "x3 "x12 "	2 1/4 "	52 5/8 "	2950	1025.00

Furnished in 2 or 3 phase only.

Can also be furnished for Direct Current and odd cycles Alternating Current; prices on application.

Grinding wheels not regularly furnished. Supplied on order.

If eye shields are not desired, deduct \$10.00 from net price.

HEAVY DUTY Variable Speed Vee Belt Snagging Grinder, designed for high-speed production grinding. Three speed changes are provided to maintain efficient peripheral speeds for either vitrified or high speed grinding wheels. In changing the spindle speed, it is only necessary to raise the motor, releasing the tension on the Vee belts, and move the 3-speed sheave on the spindle into the next position by means of a rack and pinion.

A positive speed control prevents over-speeding as well as under-speeding of the wheels, insuring on one hand maximum production at all times and on the other, perfect protection to the operator.

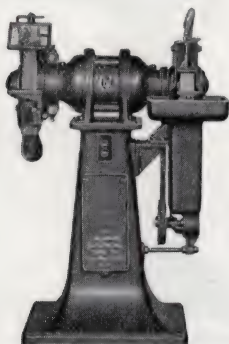
Nickel steel shaft—supported by four heavy duty sealed type ball bearings in dust-proof housings.

Wheel guards are of boiler plate, adjustable, and have hinged doors, spark breakers, non-shatterable glass eye-shields and exhaust connections. Tool rests are also adjustable.

Automatic safety starter with overload protection and no voltage release is mounted in the base of grinder. Push-button station is mounted on the motor frame.



Combination Wet and Dry Grinder Ball Bearing



Surface
Grinding
Attachment

Alternating Current — Direct Current

Type and Current	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Height to Center of Spindle	Distance bet. Wheels	Weight Lbs.	Net Price
*WGA- AC	220-440	3	1750	12x2	37 $\frac{1}{2}$ "	22 $\frac{3}{4}$ "	740	\$330.00
WG - DC	115-230	3	1750	12x2	37 $\frac{1}{2}$ "	22 $\frac{3}{4}$ "	750	390.00

*Furnished in 2 or 3 phase only.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

Grinding wheels not included. Furnished on order.

Surface Grinding Attachment for dry side can be furnished if desired. Net price \$45.00.

Can also be furnished for wet grinding on both sides. Net price \$75.00 extra.

Heavy Duty Combination Wet and Dry Grinder, especially adapted for continuous production work.

Wet Grinding side has a special hood, splash bowl, water reservoir with settling chamber, adjustable nozzle, valve and centrifugal pump. The splash bowl and reservoir are of one piece and have a capacity of 2 $\frac{1}{2}$ gallon or more.

The Cincinnati

Ball Bearing Floor Grinders and Buffers



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Size	Hgt. to Center of Spindle	Spindle Exd One End	Weight Lbs.	Net Price
*KHA - AC	110-220	$\frac{1}{2}$	3525	8x1	38"	12"	195	\$115.00
KH - DC	115-230	$\frac{1}{2}$	2825	8x1	38"	12"	195	125.00
*KRA - AC	110-220	1	1750	10x1 $\frac{1}{4}$	39"	14 $\frac{1}{2}$ "	300	165.00
KR - DC	115-230	1	2000	10x1 $\frac{1}{4}$	39"	14 $\frac{1}{2}$ "	300	185.00
†KTA - AC	220-440	2	1750	12x2	38"	16"	470	245.00
KT - DC	115-230	2	1750	12x2	38"	13"	500	300.00
†KVA - AC	220-440	3	1750	14x2 $\frac{1}{2}$	38"	16"	600	285.00
KV - DC	115-230	3	1750	14x2 $\frac{1}{2}$	38"	16"	650	375.00

*Also furnished for 220 or 440 volts, 60 cycles, 2 or 3 phase.

†Made in 2 or 3 phase only.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

Buffing Wheels not included—furnished on order.

Grinding wheels not included with 2 and 3 H.P. Grinders. Furnished on order.

Eye shield is regularly furnished with 2 and 3 H.P. Grinders only. If not desired, deduct \$5.00 from net price.

If Bench Grinder is desired, deduct \$20.00 from net price.

THE above machine offers an unusually wide range of work, as it can be used for grinding and buffing at the same time.



THE CINCINNATI ELECTRICAL TOOL CO.

Floor Buffers and Polishing Lathes Ball Bearing



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Load Speed R.P.M.	Hgt. to Center of Spindle	Distance between Wheels	Weight Lbs.	Net Price
*DHA - AC	110-220	$\frac{1}{2}$	3525	38"	29 $\frac{1}{4}$ "	175	\$115.00
DH - DC	115-230	$\frac{1}{2}$	2825	38"	29 $\frac{1}{4}$ "	175	125.00
*DRA - AC	110-220	1	1750	39"	32"	225	165.00
DR - DC	115-230	1	2575	39"	32"	225	185.00

*Also furnished for 220 or 440 volts, 60 cycles, 2 or 3 phase.
If Bench Buffer is desired, deduct \$20.00 from net price.

1 H.P. Alternating Current Buffer also furnished 3400 R.P.M. if desired, same price.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

Buffing Wheels not included—furnished on order.

Floor Buffer and Polishing Lathe, adapted for polishing and buffing of any description.

The Cincinnati

Ball Bearing Floor Buffers



Alternating Current—Direct Current

Type and Current	Volts	P. H.	Load Speed R.P.M.	Hgt. to Center of Spindle	Distance between Wheels	Weight Lbs.	Net Price
*DTA -AC	220-440	2	1750	37½"	36"	425	\$245.00
DT -DC	115-230	2	1750	38"	37"	435	300.00
*DVA -AC	220-440	3	1750	38"	36"	475	285.00
DV -DC	115-230	3	1750	39"	37"	495	375.00
*DFA -AC	220-440	5	1750	38"	42" or 52"	510	325.00
DF -DC	115-230	5	1750	39"	42" or 52"	575	465.00
*DSA -AC	220-440	7½	1750	37"	42" or 52"	720	405.00
DS -DC	115-230	7½	1750	38"	42" or 52"	775	535.00

*Made in 2 and 3 phase only
Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

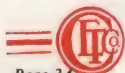
Buffing Wheels not included. Furnished on order.

Alternating Current Buffers also furnished 3400 R.P.M. if desired.

Direct Current Buffers can be furnished with variable speed motors at 10% additional charge.

If Bench Buffer is desired, deduct \$20.00 from net price.

FULLY enclosed Buffer and Polishing Lathe, especially built for heavy polishing and buffing jobs of all kinds.



THE CINCINNATI ELECTRICAL TOOL CO.

Ball Bearing Floor Buffers



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Load Speed R.P.M.	Hgt. to Center of Spindle	Distance between Wheels	Weight Lbs.	Net Price
*DKA -AC	220-440	2	1750	37½"	34"	390	\$235.00
DK -DC	115-230	2	1750	38"	35"	420	290.00
*DLA -AC	220-440	3	1750	38"	34"	450	275.00
DL -DC	115-230	3	1750	39"	34"	475	365.00
*DMA -AC	220-440	5	1750	38"	40"	490	315.00
DM -DC	115-230	5	1750	39"	40"	525	450.00

*Made in 2 and 3 phase only.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

If Bench Buffer is desired, deduct \$20.00 from net price.

Buffing Wheels not included. Furnished on order.

FLOOR BUFFER and Polishing Lathe, adapted for polishing and buffing of any description. Also suitable for tire vulcanizing shop, to handle the various operations in retreading and repairing automobile tires.

The Cincinnati

Vee Belt Buffers — Single and Double Motor Drive



Single Motor Drive

Type	HP	Dia. Shaft bet. Flanges	Dist. bet. Wheel Flanges	Dist. bet. Wheels	Height to Center of Spindle	Wght. Lbs.	Net Price
COA	3	1 1/4"*	3'	51 3/4"	39"	1300	\$375.00
EOA	5	1 1/4"*	3'	51 3/4"	39"	1350	395.00
GOA	7 1/2	1 1/4"*	3'	54"	39"	1550	450.00
HOA	10	1 1/4"*	3'	54"	39"	1650	500.00
LOA	15	1 1/4"*	3'	54"	39"	1900	610.00

Double Motor Drive

DOA	two 3	1 1/4"*	3'	51 3/4"	39"	1400	560.00
MOA	" 5	1 1/4"*	3'	51 3/4"	39"	1475	585.00
NOA	" 7 1/2	1 1/4"*	3'	54"	39"	1800	625.00
SOA	" 10	1 1/4"*	3'	54"	39"	2000	725.00

*Can furnish 1 1/2" shafts at standard list price.

Made in 2 or 3 phase only.

Can also be furnished for Direct Current and odd cycles Alternating Current; prices on application.

Vee-Belt Driven Buffers designed for the heaviest polishing jobs on production work. Any spindle speed can be furnished and speeds are quickly changed by changing the motor pulley only. Nickel steel spindles are mounted on four extra large ball-bearings running in oil. Overhanging spindle construction facilitates the handling of large work. Ball-bearing motors with safety type starters and push-button control.



THE CINCINNATI ELECTRICAL TOOL CO.

Ball Bearing Speed Lathe



Alternating Current—Direct Current

Type and Current	Volts	H. P.	Taper Socket	Weight Lbs.	Net Price
*FBA-AC	110-220	$\frac{3}{4}$	No. 2	150	\$150.00
FB -DC	115-230	$\frac{3}{4}$	No. 2	165	150.00

* Also furnished for 220 or 440 volts, 60 cycles, 2 or 3 phase, same price.

For other than 50 or 60 cycles, increase price 10%.

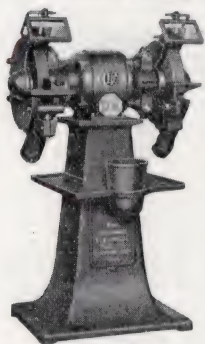
If Bench Lathe is desired, deduct \$20.00 from net price.

Speed Lathe especially adapted for burring, reaming, countersinking, filing, polishing and lapping small parts of all kinds.

Furnished in speeds 90 to 3400 R.P.M. to meet special applications.

May be had with chuck instead of Morse taper socket if desired.

Tungsten Carbide Tool Grinder Ball Bearing



Tool Support and
Angle Rest

Alternating Current — Direct Current

ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Distance bet. Wheels	Height to Center of Spindle	Weight Lbs.	Net Price
*CDA	220-440	2	1750	12"x2"	22½"	37½"	550	\$295.00

DIRECT CURRENT SPECIFICATIONS

CD	115-230	2	1750	12"x2"	24"	37½"	600	370.00
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*Made in 2 or 3 phase only.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

Grinding Wheels not included. Furnished on order.

If fixture and wheel guard is desired on both sides, add \$50.00 to net price.

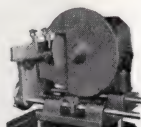
A PRECISION GRINDER for grinding Tungsten Carbide and other high-speed cutting tools. The tool support for the angle tool rest is adjustable not only to height, but also for angles up to 45 degrees. The angle tool rest on top of the tool support is also adjustable to 45 degrees right or left hand and can be locked in position or left free for rounding nose of tools. The rest can also be moved across the face of the wheel in a straight line, as the guide slot in the tool support is machined to close limits for that purpose.



THE CINCINNATI ELECTRICAL TOOL CO.

The Cincinnati

Combination Cut-off Machine and Grinder Ball Bearing



Stock Holding
Device

Alternating Current — Direct Current

Type and Current	Volts	H. P.	Load Speed R. P. M.	Grinding Wheel Size	Cut-off Wheel Size	Distance Bet. Wheels	Hgt. to Cen- ter of Spindle	Weight Lbs.	Net Price
*FDA - AC	220-440	1	3400	8x1	10x $\frac{1}{16}$	17"	39"	375	\$225.00
FD - DC	115-230	1	3400	8x1	10x $\frac{1}{16}$	17"	39"	375	245.00

*Can also be furnished with repulsion induction motor, 110 or 220 volts, 60 cycles, single phase, regular net price.

Grinding wheel and abrasive cut-off wheel not included. Furnished on order.

If Bench Type is desired, deduct \$20.00 from list price.

SUITABLE for tool-room cutting and grinding, also for specimens for microphotography in research laboratories.

The machine carries a 10" x $\frac{1}{16}$ " abrasive cut-off wheel on the right-hand side, operating at a peripheral speed of approximately 9,000 S.F.M., and the material to be cut is fed into the wheel by means of a hand-screw. The vise or holding fixture may be tilted to give any angle desired up to 15 degrees. The machine will cut stock up to $1\frac{1}{4}$ " size in approximately 20 seconds and the smaller sizes proportionately.

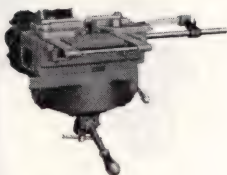
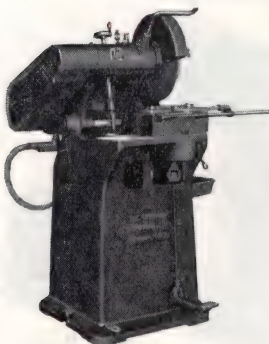
The left-hand side of the machine is equipped with an 8" x 1" grinding wheel. An adjustable tool rest is mounted on the wheel guard.

ELECTRIC DRILLS — GRINDERS — BUFFERS



The Cincinnati

High Speed Cut-off Machine



Hand operated,
positive locking vise.

Alternating Current—Direct Current

Type and Current	Volts	H. P.	Spindle Speed R. P. M. 12" Wheel	Spindle Speed R. P. M. 14" Wheel	Size of Base at Bottom	Weight Lbs.	Net Price
*JCA-AC	220-440	7½	5200	4300	43½"x26"	1250	\$600.00
JC-DC	115-230	7½	5200	4300	43½"x26"	1300	825.00

*Made in 2 or 3 phase only.

When ordering, specify whether hand or foot operated vise for straight cuts only is desired.

Also furnished with angle-cutting vise, hand or foot operated, \$25.00 extra. (Specify which, if desired.)

Abrasive cut-off wheels are not included. Furnished on order.

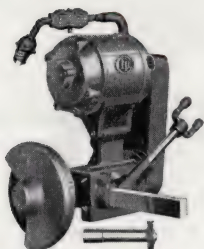
"THE CINCINNATI" High Speed Cut-off Machine is built to carry abrasive wheels, 12" or 14" x $\frac{3}{8}$ " or $\frac{1}{8}$ " thick, operating at a peripheral speed of approximately 16,000 surface feet per minute. Unexcelled for the speedy cutting of steel alloys, non-ferrous metals such as brass, copper, aluminum, as well as fibrous materials of all kinds, in various sizes, angles and shapes up to 2¼" inclusive.

Spindle is of nickel steel and extra heavy. Deep-groove ball bearings on spindle are mounted in dust-proof housings. Safety type starter with push button control.



THE CINCINNATI ELECTRICAL TOOL CO.

Tool Post Grinders Ball Bearing



Type FU



Type LBU

Universal Motor for A. C. or D. C.

Type	Volts	H. P.	Load Speed R.P.M.	Wheel Incl.	Weight Lbs.	Price Net
FU with feed	110	$\frac{1}{3}$	3450	$5 \times \frac{3}{8}$	27	\$85.00
LU without feed	110	$\frac{1}{3}$	3450	$5 \times \frac{3}{8}$	23	75.00
LBU	110	$\frac{1}{3}$	3450	$5 \times \frac{3}{8}$	25	75.00

Also furnished for 220 and 250 volts.

TYPES FU and LU Belt Driven Tool Post Grinders, with and without feed respectively, especially adapted for grinding lathe centers, cutters, reamers, rolls, dies, etc., can also be used in a shaper or planer for surface grinding. Offset spindle construction affords maximum clearance across the face of the grinding wheel. Pivotal mounting of motor on bracket provides for maintenance of proper belt tension. Type FU has a 3" horizontal travel through the V slide by means of a worm and is fitted with a gib to take up the wear.

TYPE LBU Belt Driven Grinder for mounting on compound rest of 9" lathes and larger. Will grind work within $2\frac{1}{2}$ " of the maximum lathe swing. The Grinder may be swiveled about the clamping bolt and proper provision is also made for changing the height of the spindle. The universal motor is pivotally mounted on the spindle bracket for maintaining proper belt tension. The distance from the center of the spindle to the center of the tool post is $1\frac{1}{8}$ ". The maximum distance from the center of the spindle to the base is 1".

In ordering, give dimensions of the tool post slot, so that proper adaptor may be furnished. Furnished complete as illustrated.

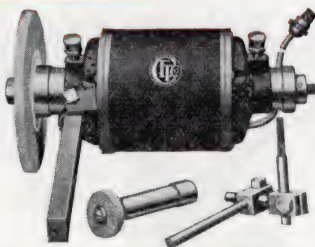
Tool Post Grinder Without Feed

Alternating Current
Direct Current

Universal Motor for
A. C. and D. C.

A. C. speed for 25 cycles,
1500 R.P.M.

For other than 50 or 60
cycles, increase price
10%.



Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Incl'd	Weight Lbs.	Net Price
*PA -AC	110	1/4	3450	6x3/8x1/2	27	\$ 65.00
P -DC	115-230	1/4	3650	6x3/8x1/2	17	70.00
*PHA-AC	110	1/2	3450	8x3/4x5/8	45	98.00
PH -DC	115-230	1/2	2650	8x3/4x5/8	42	108.00
*POA-AC	110	1	1700	10x1 x3/4	95	145.00
PO -DC	115-230	1	2000	10x1 x3/4	98	165.00
PU-Univ.	110-220	1/4	7300	4 1/2 x 3/8 x 1/2	22	60.00

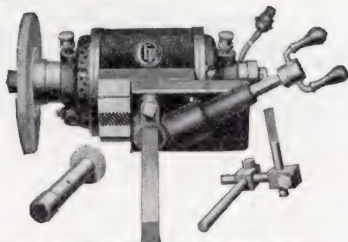
Tool Post Grinder With Feed

Alternating Current
Direct Current

Universal Motor for
A. C. and D. C.

A. C. speed for 25 cycles,
1500 R.P.M.

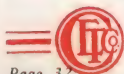
For other than 50 or 60
cycles, increase price
10%.

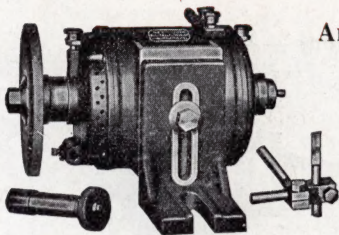


Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Incl'd	Weight Lbs.	Net Price
*SA -AC	110	1/4	3450	6x3/8x1/2	32	\$ 75.00
S -DC	115-230	1/4	3650	6x3/8x1/2	22	80.00
*SSA-AC	110	1/2	3450	8x3/4x5/8	55	108.00
SS -DC	115-230	1/2	2650	8x3/4x5/8	50	118.00
SU-Univ.	110-220	1/4	7300	4 1/2 x 3/8 x 1/2	26	70.00

*Also furnished for 220 or 440 volts, 60 cycles, 1, 2 or 3 phase.

Tool Post Grinders, without feed and with horizontal feed, which are especially adapted for grinding lathe centers, cutters, reamers, dies, etc. Adjustable bronze bearings. The extension mandrel is a handy attachment for certain internal grinding jobs.





Angle Plate Grinder

ANGLE-PLATE GRINDER, which is especially recommended for light, smooth grinding of all kinds. The motor has a vertical adjustment and the Grinder can be swiveled to any angle by means of the screw and slot in the angle plate.

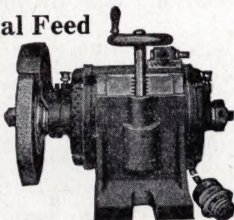
Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Incl'd	Weight Lbs.	Net Price
*TPA-AC	110	$\frac{1}{4}$	3450	$6 \times \frac{1}{2} \times \frac{1}{2}$	32	\$65.00
TP -DC	115-230	$\frac{1}{4}$	3650	$6 \times \frac{1}{2} \times \frac{1}{2}$	20	70.00

*Also made in 220 or 440 volts, 60 cycles, 1, 2 or 3 phase, same price
Speed for 25 cycles, 1500 R.P.M.
For other than 50 or 60 cycles, increase price 10%.

Parallel Grinder - Vertical Feed

Alternating Current
Direct Current

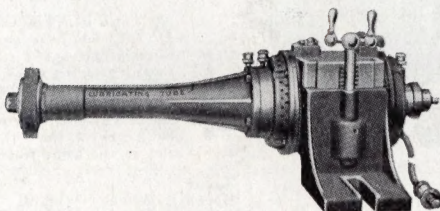
PORTABLE Heavy Duty Parallel Grinder, which is especially adapted for grinding spindles, rolls, journals, bushings, connecting rods and parallel work of all kinds.



Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Incl'd	Weight Lbs.	Net Price
*TA -AC	110	$\frac{1}{2}$	3450	$8 \times \frac{3}{4} \times \frac{5}{8}$	60	\$110.00
T -DC	115-230	$\frac{1}{2}$	2650	$8 \times \frac{3}{4} \times \frac{5}{8}$	52	120.00
*TTA-AC	110	1	1750	$10 \times 1 \times \frac{3}{4}$	96	145.00
TT -DC	115-230	1	2000	$10 \times 1 \times \frac{3}{4}$	102	165.00
†TVA-AC	220-440	2	1750	$12 \times 1 \frac{1}{2} \times 1$	240	250.00
TV -DC	115-230	2	1700	$12 \times 1 \frac{1}{2} \times 1$	275	280.00
†TFA-AC	220-440	3	1750	$14 \times 2 \times 1$	260	305.00
TF -DC	115-230	3	1500	$14 \times 2 \times 1$	300	335.00

*Also made in 220 or 440 volts, 60 cycles, 1, 2 or 3 phase, same price
†Made in 2 or 3 phase only.
Speed for 25 cycles, 1500 R.P.M.
For other than 50 or 60 cycles, increase price 10%.

Internal Grinders — Vertical Feed



Alternating Current—Direct Current

Type and Current	Volts	HP.	Load Speed RPM.	Wheel Incl'd	Length Std. Ext.	Weight Pounds	Net Price
*VA -AC	110	$\frac{1}{2}$	3450	†5"x1"	12"	64	\$130.00
V -DC	115-230	$\frac{1}{2}$	2650	†5"x1"	12"	70	140.00
*VVA-AC	110	1	3450	†6"x1"	12"	100	175.00
VV -DC	115-230	1	2675	†6"x1"	12"	105	195.00

*Can also be furnished for 220 or 440 volts, 1, 2 or 3 phase.
Speed for 25 cycles, 1500 R.P.M.

†Smaller or larger diameter wheels can be furnished; minimum diameter wheels, $\frac{1}{2}$ H.P., 2"; 1 H.P., 3 $\frac{1}{2}$ ".

For other than 50 or 60 cycles, increase price 10%.

INTERNAL GRINDER which is recommended for finishing Air, Steam or Gas Engine Cylinders. Also, for dies and cylindrical work of all kinds. This tool is of the same general design as the Parallel Grinders, shown on page 27, having a vertical adjustment of about 4", and is used in the same manner.

The standard size of extension spindle is 12", but shorter or longer furnished as required. This extension is detachable at the body of the motor and the Grinder can be used for external work. Split taper bronze bearings adjustable to wear.



THE CINCINNATI ELECTRICAL TOOL CO.

Portable Electric Grinders



Ball Bearing
Universal Motor
for
A. C. and D. C.

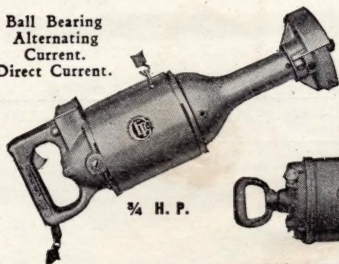
Type and Current	Volts	H. P.	Speed R.P.M.	Wheel Incl'd	Weight Lbs.	Net Price
HBU	110	$\frac{1}{3}$	4600	$5 \times \frac{3}{4} \times \frac{1}{2}$	14	\$ 60.00
HHU	110	$\frac{1}{2}$	3600	$5 \times 1 \times \frac{5}{8}$	23	80.00
NSU	110	$\frac{3}{4}$	3600	$6 \times 1 \times \frac{5}{8}$	25	100.00

Also furnished for 220 and 250 volts.

LIGHT WEIGHT Universal Motor Hand Grinder and Buffer. Especially adapted for grinding off gas and arc welds, also sanding, buffing and polishing of all kinds. An indispensable tool for the body builder, welding shop and garage.

Portable Electric Grinders

Ball Bearing
Alternating
Current.
Direct Current.



$\frac{3}{4}$ H. P.

This Grinder can be carried to the work or suspended anywhere, as any length cord can be used. It will be found particularly handy where the work cannot be taken to the grinding machine.



1 and $\frac{1}{2}$ H. P.

Type and Current	Volts	H. P.	Load Speed R.P.M.	Wheel Incl'd	Weight Lbs.	Net Price
*ABA - AC	110	$\frac{3}{4}$	3475	$7 \times 1 \frac{1}{4} \times \frac{5}{8}$	45	\$120.00
AB - DC	115-230	$\frac{3}{4}$	2675	$7 \times 1 \frac{1}{4} \times \frac{5}{8}$	45	120.00
*ASA - AC	110	1	3400	$8 \times 1 \frac{1}{2} \times \frac{3}{4}$	80	145.00
AS - DC	115-230	1	2575	$8 \times 1 \frac{1}{2} \times \frac{3}{4}$	80	155.00
†ARA - AC	220-440	$1 \frac{1}{2}$	3400	$8 \times 1 \frac{1}{2} \times \frac{3}{4}$	90	170.00
AR - DC	115-230	$1 \frac{1}{2}$	2450	$8 \times 1 \frac{1}{2} \times \frac{3}{4}$	90	180.00

*Also furnished for 220 or 440 volts, 60 cycles, 1, 2 or 3 phase.

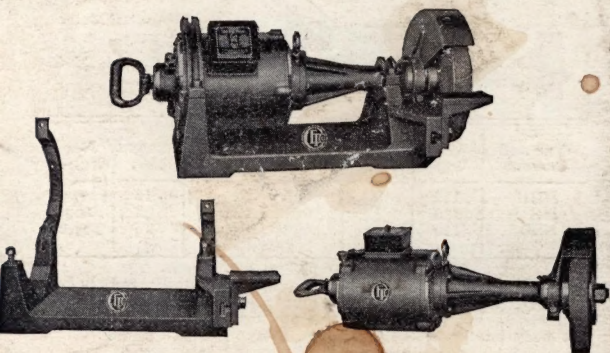
†Made in 2 or 3 phase only.

Speed for 25 cycles. 1500 R.P.M.

For other than 50 or 60 cycles, increase price 10%.

The Cincinnati

Combination Aerial and Bench Grinder



Alternating Current, 2 or 3 Phase Only

Type	Volts	HP	Load Speed RPM	Wheel Incl'd	Length Overall	Weight Pounds Grinder only	Weight Pounds Grinder and Bench Base	Net Price
HBA	220-440	2	1750	14"x2"	37 $\frac{5}{8}$ "	220	355	225.00

Furnished complete with Bench Base, Grinding Wheel, Wheel Guard, Adjustable Grinding Rest, Suspension Spring and push-button safety switch.

If Aerial Grinder only is desired, deduct \$25.00 from net price.

EXTREMELY useful combination tool for general utility grinding in both small and large shops. A heavy duty fully enclosed ball bearing aerial grinder designed for the most severe service in grinding rough castings, welds or general grinding, buffing or polishing of all kinds.

The grinder is perfectly balanced, enabling the operator to grind in any position. It can be carried anywhere, as any length cord can be used. The wheel guard is of boiler plate and is adjustable to any angle most convenient for the operator.

The heavy cast base with adjustable cast-steel grinding rest makes possible the adaptability of this heavy duty aerial grinder as a bench grinder and is ideally suited for grinding tools and small castings of all kinds.

Quick change from bench to aerial grinder can be made by merely removing two cap screws.



THE CINCINNATI ELECTRICAL TOOL CO.